

GENERIC DATA PROCESSING ENGINE

ABSTRACT OF THE DISCLOSURE

5 A generic data processing engine is operable to receive a format definition
and process data formatted according to the definition, without use of formatting
information in the data. The format definition includes a description of the syntax
of the format, and a description of the semantics of the format. The syntax and
semantics may be described in the same language or in different languages, and
the engine is configured to produce an internal representation of the syntax and
semantics. The engine receives queries and uses them together with the internal
10 representation to set masks for the filters. The filters apply the masks to the data
and return filtered data to the engine, which may forward a portion of the filtered
data to applications, store a portion of the filtered data, set new masks based on a
portion of the filtered data, or modify the existing masks based on a portion of the
filtered data. The filters may also be configured to return filtered data directly to
15 applications, bypassing the engine.